

# Scottsdale Unsalted Frequently Asked Questions about Salinity

On March 18, 2014, the Scottsdale City Council approved a 2-year pilot Salinity Reduction Rebate Program. The goal is to reduce the amount of salt introduced to the city's wastewater system by encouraging the removal or replacement of inefficient water softeners.

The program will begin at **8 a.m. on Tuesday, July 1, 2014**. This two-year pilot program is available to **Scottsdale residential sewer customers** and has three options:

- A one-time \$50 rebate to the first 300 approved applicants each year who replace an existing self-regenerating salt-using water softener with a more efficient demand-based softener
- A one-time \$100 rebate to the first 100 approved applicants each year who remove an existing self-regenerating salt-using water softener and subscribe to a portable exchange service
- A \$250 rebate to the first 200 approved applicants who completely remove a self-regenerating salt-using water softener (\$125 issued initially and \$125 issued after one year)

### Q: What is salinity?

**A:** Salinity, measured in total dissolved solids (TDS) is the amount of salt and dissolved solids found in both water and wastewater.

## Q: How do salt-using water softeners contribute to the salinity level?

A: Salt-using water softeners contribute to the salinity level by discharging high levels of salt to the city's sewer system each time they self-regenerate. This makes self-regenerating salt-using water softeners the largest contributors of added TDS in Scottsdale's reclaimed water (highly treated wastewater). As people try to combat the natural water hardness using conventional salt-using water softeners, increased levels of salt enter into the city's sewer system and treatment plants. As this water goes into aquifers it can negatively impact the environment and will eventually add significant costs to water and sewer utility providers as they deal with this challenge. Scottsdale Water Resources estimates that salt-using water softeners are responsible for over 30% of the total salinity in our wastewater.

# Q: Why is this so important to Scottsdale?

**A:** In Scottsdale, this is especially important because all of our wastewater is essentially reclaimed and reused. Too much salt in reclaimed water makes reuse more challenging and costly because this salt stays in the soil and aquifers creating long-term environmental issues.

#### Q: Is it better if I use potassium instead of sodium in my water softener?

**A:** Using potassium chloride instead of sodium chloride in your water softener may be beneficial for turf irrigation. However, potassium chloride is still a salt and is actually less efficient at softening water than sodium chloride. As a result, potassium chloride use adds about 25% more salt to the sewer system than sodium chloride. This increases the salinity levels of the reclaimed water used to recharge aquifers.

#### Q: Can you treat the water to eliminate the need for water softeners?

**A:** It may be possible for Scottsdale to soften water or remove most of the minerals and salts that occur naturally in our water sources through additional water treatment processes. However, these systems would require substantial costs to design, construct and maintain; costs passed on to you, our customers, increasing your monthly bill significantly.

Additionally, approximately 70% of the potable water we produce is used outdoors. This means that we would soften water that does not need softening.

# Q. Why is Scottsdale offering these rebates?

**A.** Scottsdale is investigating the viability of reducing salinity from salt-using water softeners at the source – our customers' homes – through this two-year pilot rebate program.